

10/533, 950

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

~~10/533, 950~~

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1	Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	"Ask CAS" for self-help around the clock
NEWS 3 SEP 09	ACD predicted properties enhanced in REGISTRY/ZREGISTRY
NEWS 4 OCT 03	MATHDI removed from STN
NEWS 5 OCT 04	CA/CAPLUS-Canadian Intellectual Property Office (CIPO) added to core patent offices
NEWS 6 OCT 13	New CAS Information Use Policies Effective October 17, 2005
NEWS 7 OCT 17	STN(R) AnaVist(TM), Version 1.01, allows the export/download of CAPLUS documents for use in third-party analysis and visualization tools
NEWS 8 OCT 27	Free KWIC format extended in full-text databases
NEWS 9 OCT 27	DIOGENES content streamlined
NEWS 10 OCT 27	EPFULL enhanced with additional content
NEWS 11 NOV 14	CA/CAPLUS - Expanded coverage of German academic research
NEWS 12 NOV 30	REGISTRY/ZREGISTRY on STN(R) enhanced with experimental spectral property data
NEWS 13 DEC 05	CASREACT(R) - Over 10 million reactions available
NEWS EXPRESS	DECEMBER 02 CURRENT VERSION FOR WINDOWS IS V8.01, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 02 DECEMBER 2005. V8.0 USERS CAN OBTAIN THE UPGRADE TO V8.01 AT <a href="http://download.cas.org/express/v8.0-Discover/">http://download.cas.org/express/v8.0-Discover/</a>
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 16:18:01 ON 05 DEC 2005

=>

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE  
Do you want to switch to the Registry File?

Choice (Y/n):

Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 16:18:16 ON 05 DEC 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 DEC 2005 HIGHEST RN 869277-23-6  
DICTIONARY FILE UPDATES: 4 DEC 2005 HIGHEST RN 869277-23-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

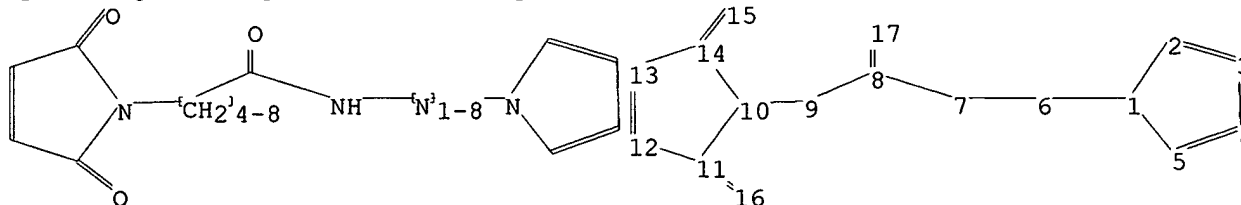
Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10533950.str



chain nodes :

6 7 8 9, 15 16 17

ring nodes :  
 1 2 3 4 5 10 11 12 13 14  
 chain bonds :  
 1-6 6-7 7-8 8-9 8-17 9-10 11-16 14-15  
 ring bonds :  
 1-2 1-5 2-3 3-4 4-5 10-11 10-14 11-12 12-13 13-14  
 exact/norm bonds :  
 1-2 1-5 1-6 6-7 7-8 8-17 10-11 10-14 11-16 14-15  
 exact bonds :  
 2-3 3-4 4-5 8-9 9-10 11-12 12-13 13-14  
 isolated ring systems :  
 containing 1 : 10 :

Match level :

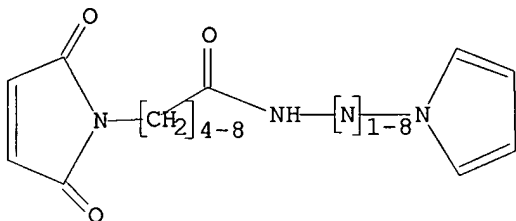
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:Atom  
 11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s li

101914 LI  
 20494 LIS

L2 122404 LI  
 (LI OR LIS)

=> s l1

SAMPLE SEARCH INITIATED 16:18:54 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 0 TO 0  
 PROJECTED ANSWERS: 0 TO 0

L3 0 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 16:19:10 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED  
SEARCH TIME: 00.00.01

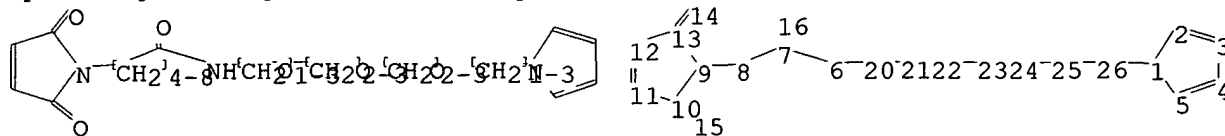
0 ITERATIONS

0 ANSWERS

L4 0 SEA SSS FUL L1

=>

Uploading C:\Program Files\Stnexp\Queries\10533950a.str



chain nodes :

6 7 8 14 15 16 20 21 22 23 24 25 26

ring nodes :

1 2 3 4 5 9 10 11 12 13

chain bonds :

1-26 6-7 6-20 7-8 7-16 8-9 10-15 13-14 20-21 21-22 22-23 23-24 24-25  
25-26

ring bonds :

1-2 1-5 2-3 3-4 4-5 9-10 9-13 10-11 11-12 12-13

exact/norm bonds :

1-2 1-5 6-7 7-16 9-10 9-13 10-15 13-14

exact bonds :

1-26 2-3 3-4 4-5 6-20 7-8 8-9 10-11 11-12 12-13 20-21 21-22 22-23  
23-24 24-25 25-26

isolated ring systems :

containing 1 : 9 :

Match level :

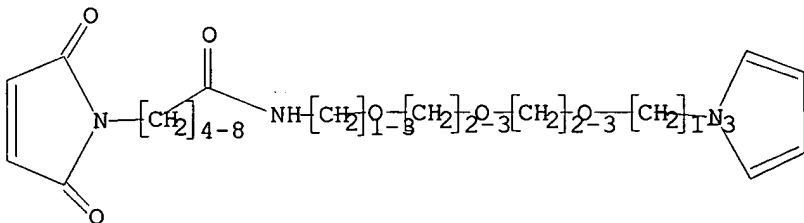
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:CLASS 15:CLASS 16:CLASS 20:CLASS 21:CLASS  
22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS

L5 STRUCTURE UPLOADED

=> d 15

L5 HAS NO ANSWERS

L5 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 15

SAMPLE SEARCH INITIATED 16:20:01 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 0 TO 0  
PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

=> s l5 sss full

FULL SEARCH INITIATED 16:20:10 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 9 TO ITERATE

100.0% PROCESSED 9 ITERATIONS 1 ANSWERS  
SEARCH TIME: 00.00.01

L7 1 SEA SSS FUL L5

=> FIL CAPLUS

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	328.55	328.76

FILE 'CAPLUS' ENTERED AT 16:21:23 ON 05 DEC 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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FILE COVERS 1907 - 5 Dec 2005 VOL 143 ISS 24  
FILE LAST UPDATED: 4 Dec 2005 (20051204/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l7

L8 1 L7

=> d l8 ibib abs hitstr tot

L8 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:432770 CAPLUS

DOCUMENT NUMBER: 140:402833

TITLE: Method for immobilizing a protein on a pyrrole-based polymer and its use for manufacture of a sensor

INVENTOR(S): Roget, Andre; Livache, Thierry; Levy, Yves

PATENT ASSIGNEE(S): Commissariat A L'energie Atomique, Fr.

SOURCE: Fr. Demande, 50 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2847581	A1	20040528	FR 2002-14580	20021121
WO 2004048972	A1	20040610	WO 2003-FR50127	20031120
W: JP, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
EP 1563304	A1	20050817	EP 2003-786063	20031120
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			FR 2002-14580	A 20021121
			WO 2003-FR50127	W 20031120

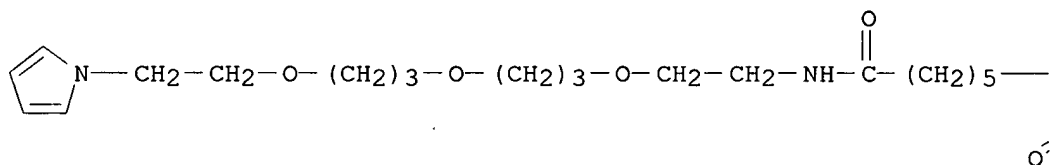
AB An invention involving a procedure for protein fixation on a pyrrole-based conducting polymer, usable in particular for the manufacture of a sensor or a multisensor. The procedure involves three steps: (1) coupling of protein to a pyrrole monomer to obtain the first solution, (2) preparation of a second solution of pyrrole not containing a protein, (3) mixture of the first solution with the second solution to obtain the electropolymn. solution, (4) electropolymn. of the pyrrole with the protein-pyrrole monomer. The proteins used may include enzymes, antibodies, antigens, hormones or membrane receptors.

IT **690256-35-ODP**, polymerization  
 RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (biosensor preparation procedure by protein immobilization on pyrrole-based polymer)

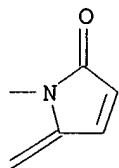
RN 690256-35-0 CAPLUS

CN 1H-Pyrrole-1-hexanamide, 2,5-dihydro-2,5-dioxo-N-[2-[3-[3-[2-(1H-pyrrol-1-yl)ethoxy]propoxy]propoxy]ethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT:

7

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```

=> s pyrrole polymer
    32806 PYRROLE
    5997 PYRROLES
    34408 PYRROLE
        (PYRROLE OR PYRROLES)
    1037306 POLYMER
    852648 POLYMERS
    1403097 POLYMER
        (POLYMER OR POLYMERS)
L9      528 PYRROLE POLYMER
        (PYRROLE(W) POLYMER)

=> s l9 and (protein or DNA or nucleic)
    1811927 PROTEIN
    1263944 PROTEINS
    2107128 PROTEIN
        (PROTEIN OR PROTEINS)
    746128 DNA
    18162 DNAS
    748961 DNA
        (DNA OR DNAS)
    176443 NUCLEIC
    13 NUCLEICS
    176446 NUCLEIC
        (NUCLEIC OR NUCLEICS)
L10     13 L9 AND (PROTEIN OR DNA OR NUCLEIC)

=> s polypyrrole
    10973 POLYPYRROLE
    1278 POLYPYRROLES
L11     11231 POLYPYRROLE
        (POLYPYRROLE OR POLYPYRROLES)

=> s l11 and (protein or DNA or nucleic)
    1811927 PROTEIN
    1263944 PROTEINS
    2107128 PROTEIN
        (PROTEIN OR PROTEINS)
    746128 DNA
    18162 DNAS
    748961 DNA
        (DNA OR DNAS)
    176443 NUCLEIC
    13 NUCLEICS
    176446 NUCLEIC
        (NUCLEIC OR NUCLEICS)
L12     341 L11 AND (PROTEIN OR DNA OR NUCLEIC)

=> l12 and (electropolymerization or electroconducting)
L12 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l12 and (electropolymerization or electroconducting)
    907 ELECTROPOLYMERIZATION
    5 ELECTROPOLYMERIZATIONS
    912 ELECTROPOLYMERIZATION
        (ELECTROPOLYMERIZATION OR ELECTROPOLYMERIZATIONS)
    4515 ELECTROPOLYMN
    22 ELECTROPOLYMNS
    4522 ELECTROPOLYMN
        (ELECTROPOLYMN OR ELECTROPOLYMNS)

```

4633 ELECTROPOLYMERIZATION  
 (ELECTROPOLYMERIZATION OR ELECTROPOLYMN)  
 453 ELECTROCONDUCTING  
 L13 37 L12 AND (ELECTROPOLYMERIZATION OR ELECTROCONDUCTING)

=> s l13 and (immobili? or support)  
 125986 IMMOBILI?  
 432143 SUPPORT  
 121014 SUPPORTS  
 513531 SUPPORT  
 (SUPPORT OR SUPPORTS)

L14 24 L13 AND (IMMOBILI? OR SUPPORT)

=> s l14 and (maleimide or succinimide or NHS)  
 13214 MALEIMIDE  
 2823 MALEIMIDES  
 13922 MALEIMIDE  
 (MALEIMIDE OR MALEIMIDES)  
 9310 SUCCINIMIDE  
 1161 SUCCINIMIDES  
 9613 SUCCINIMIDE  
 (SUCCINIMIDE OR SUCCINIMIDES)  
 1491 NHS

L15 0 L14 AND (MALEIMIDE OR SUCCINIMIDE OR NHS)

=> s l14 and ?succinimide  
 30329 ?SUCCINIMIDE

L16 1 L14 AND ?SUCCINIMIDE

=> s l16 not l8  
 L17 1 L16 NOT L8

=> d l17 ibib abs hitstr tot

L17 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2005:260111 CAPLUS  
 DOCUMENT NUMBER: 142:317271  
 TITLE: Saccharide-graft polymers and the use thereof for  
 screening processes.  
 INVENTOR(S): Livache, Thierry; Brengel-Pesce, Karen; Mercey,  
 Emilie; Roget, Andre; Sadir, Rabia; Levy, Yves;  
 Lortat-Jacob, Huges  
 PATENT ASSIGNEE(S): Commissariat A L'energie Atomique, Fr.; Centre  
 National De La Recherche Scientifique  
 SOURCE: PCT Int. Appl., 51 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
WO 2005026219	A1	20050324	WO 2004-FR2358	20040917
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,			
	CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,			
	GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,			
	LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,			
	NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,			
	TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,			
	AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,			
	EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,			



SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
SN, TD, TG

FR 2859998                      A1            20050325            FR 2003-10956                      20030918  
PRIORITY APPLN. INFO.:                      FR 2003-10956                      A    20030918

AB    The invention relates to electrochem. prepared polymers having chemical synthetic or natural saccharidic mols. attached. Said polymers make it possible to fix the saccharidic mols. to a solid **support** for screening mols., mol. systems or target microorganisms in a solution. A typical polymer was manufactured by heating a 250 µL 50 mM solution of 11-(1-pyrrolyl)undecanoyl hydrazide in DMSO with a 12.5 µL 20 mM solution of degraded heparan sulfate in 2M acetate buffer at 56°, adding 25 µL 4M NaCNBH3 solution in EtOH after 6-8 h, continuing the heating at 56° for a total of 48 h, and **electropolymer.** of the resulting pyrrole-heparan oligomer derivative as a 20 mM solution in a 25 mM phosphate buffer on a glass plate for 125 ms at potential 2.4 V. The interaction of the polymer with biotinylated SDF chemokines was studied by fluorescence spectroscopy.

REFERENCE COUNT:                      4            THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s polymer

1037306 POLYMER  
852648 POLYMERS  
L18    1403097 POLYMER  
          (POLYMER OR POLYMERS)

=> s l18 and (pyrrole!based or pyrrole based or pyrrole containing)

0 PYRROLE!BASED  
32806 PYRROLE  
5997 PYRROLES  
34408 PYRROLE  
          (PYRROLE OR PYRROLES)  
1828654 BASED  
144 PYRROLE BASED  
          (PYRROLE(W) BASED)  
32806 PYRROLE  
5997 PYRROLES  
34408 PYRROLE  
          (PYRROLE OR PYRROLES)  
567159 CONTAINING  
1 CONTAININGS  
567160 CONTAINING  
          (CONTAINING OR CONTAININGS)  
3868131 CONTG  
35 CONTGS  
3868142 CONTG  
          (CONTG OR CONTGS)  
4021930 CONTAINING  
          (CONTAINING OR CONTG)  
275 PYRROLE CONTAINING  
          (PYRROLE(W) CONTAINING)  
L19            157 L18 AND (PYRROLE!BASED OR PYRROLE BASED OR PYRROLE CONTAINING)

=> s l18 and (support or chip or biosensor or immobili?)

432143 SUPPORT  
121014 SUPPORTS  
513531 SUPPORT  
          (SUPPORT OR SUPPORTS)  
62072 CHIP  
39765 CHIPS  
87925 CHIP  
          (CHIP OR CHIPS)

16487 BIOSENSOR  
 19627 BIOSENSORS  
 23929 BIOSENSOR  
 (BIOSENSOR OR BIOSENSORS)  
 125986 IMMOBILI?  
 L20 66082 L18 AND (SUPPORT OR CHIP OR BIOSENSOR OR IMMOBILI?)

=> s l19 and (support or chip or biosensor or immobili?)

432143 SUPPORT  
 121014 SUPPORTS  
 513531 SUPPORT  
 (SUPPORT OR SUPPORTS)  
 62072 CHIP  
 39765 CHIPS  
 87925 CHIP  
 (CHIP OR CHIPS)  
 16487 BIOSENSOR  
 19627 BIOSENSORS  
 23929 BIOSENSOR  
 (BIOSENSOR OR BIOSENSORS)  
 125986 IMMOBILI?  
 L21 14 L19 AND (SUPPORT OR CHIP OR BIOSENSOR OR IMMOBILI?)

=> s l21 and (protein or peptide or nucleic or DNA)

1811927 PROTEIN  
 1263944 PROTEINS  
 2107128 PROTEIN  
 (PROTEIN OR PROTEINS)  
 340469 PEPTIDE  
 249292 PEPTIDES  
 436056 PEPTIDE  
 (PEPTIDE OR PEPTIDES)  
 176443 NUCLEIC  
 13 NUCLEICS  
 176446 NUCLEIC  
 (NUCLEIC OR NUCLEICS)  
 746128 DNA  
 18162 DNAS  
 748961 DNA  
 (DNA OR DNAS)  
 L22 3 L21 AND (PROTEIN OR PEPTIDE OR NUCLEIC OR DNA)

=> d l22 ibib abs hitstr tot

L22 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:432770 CAPLUS

DOCUMENT NUMBER: 140:402833

TITLE: Method for **immobilizing a protein**  
 on a **pyrrole-based polymer**

and its use for manufacture of a sensor

INVENTOR(S): Roget, Andre; Livache, Thierry; Levy, Yves

PATENT ASSIGNEE(S): Commissariat A L'energie Atomique, Fr.

SOURCE: Fr. Demande, 50 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
FR 2847581	A1	20040528	FR 2002-14580	20021121
WO 2004048972	A1	20040610	WO 2003-FR50127	20031120

W: JP, US  
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
IT, LU, MC, NL, PT, RO, SE, SI, SK, TR  
EP 1563304 A1 20050817 EP 2003-786063 20031120  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK  
PRIORITY APPLN. INFO.: FR 2002-14580 A 20021121  
WO 2003-FR50127 W 20031120

AB An invention involving a procedure for **protein** fixation on a **pyrrole-based** conducting **polymer**, usable in particular for the manufacture of a sensor or a multisensor. The procedure involves three steps: (1) coupling of **protein** to a pyrrole monomer to obtain the first solution, (2) preparation of a second solution of pyrrole not containing a **protein**, (3) mixture of the first solution with the second solution to obtain the electropolymn. solution, (4) electropolymn. of the pyrrole with the **protein-pyrrole** monomer. The **proteins** used may include enzymes, antibodies, antigens, hormones or membrane receptors.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:103250 CAPLUS

DOCUMENT NUMBER: 128:112434

TITLE: Stability of dodecyl sulfate-doped poly(pyrrole)/glucose oxidase modified electrodes exposed in human blood serum

AUTHOR(S): Warriner, K.; Higson, S.; Ashworth, D.; Christie I.; Vadgama, P.

CORPORATE SOURCE: Dep. Medicine, Hope Hospital, Salford, M6 8HD, UK

SOURCE: Materials Science & Engineering, C: Biomimetic Materials, Sensors and Systems (1997), C5(2), 81-90  
CODEN: MSCEEE; ISSN: 0928-4931

PUBLISHER: Elsevier Science S.A.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The conductivity and stability behavior of dodecyl sulfate-doped poly(pyrrole)/glucose oxidase-coated electrodes was studied. Poly(pyrrole) charge transfer resistance (conductivity) during serum exposure depended on the initial redox (oxidation) state of films. Exposure of a semi-oxidized (partially conductive) film to blood serum led to a 15% increase in film conductivity; with solns. representing different blood serum constituents, deproteinized serum, high ionic strength electrolyte, and albumin, similar reduction in resistance was found. The effect of albumin was unexpected, given the lack of penetration of the 65 kDa **protein** into the film interior, however, attenuated total reflectance transform IR spectroscopy and spectral reflectance provided indirect evidence that even with albumin surface adsorption some local reordering of the poly(pyrrole) structure may occur with a change in chain conjugation length and hence conductivity. The corresponding fully oxidized (conductive) films became overoxidized and lost conductivity irreversibly in blood serum. This effect

was

also observed in films exposed to deproteinized blood serum but not high ionic strength electrolyte nor albumin solution. The overoxidn. was confirmed by an increased amperometric response towards cationic dopamine and a decreased response to anionic ascorbate. This is due to the insertion of hydroxyl and/or carbonyl groups during the overoxidn. process which leads to a net neg. charge on the **polymer** film hence facilitating dopamine partitioning. Following serum exposure the amperometric glucose responses were lowered. This was attributed to the loss of glucose oxidase from the film as the **polymer** became overoxidized and

adopted a more porous structure. A possible reason for the loss of poly(pyrrole) conductivity is the reaction of conducting bipolarons on the **polymer** with low mol. weight species in serum. The retention of conductivity at partially oxidized poly(pyrrole) may reside in the low level of reactive bipolaron sites on the **polymer** backbone. Implications on the development of poly(**pyrrole**)-based blood glucose sensors are discussed, and means by which adverse serum interactions might be minimized are suggested.

L22 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:420554 CAPLUS  
DOCUMENT NUMBER: 113:20554  
TITLE: Electrodes incorporating antibodies or other macromolecular binding partners, processes for producing them, and their use  
INVENTOR(S): Wallace, Gordon George  
PATENT ASSIGNEE(S): Wollongong Uniadvice Ltd., Australia  
SOURCE: PCT Int. Appl., 35 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8911649	A1	19891130	WO 1989-AU214	19890516
W: AU, JP, US				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AU 8935762	A1	19891212	AU 1989-35762	19890516
PRIORITY APPLN. INFO.:			AU 1988-8262	A 19880516
			WO 1989-AU214	A 19890516

AB Polymeric electrodes are provided which comprise a conductive **polymer** having  $\geq 1$  partner of a macromol. binding pair incorporated therein. The **polymer**, e.g. polypyrrole, is electrochem. generated at a Pt, Au, or C electrode surface. The macromol. binding partner may be an antibody, antigen, lectin, **nucleic acid**, etc. Thus, antibodies to Legionella were incorporated into polypyrrole **polymer** electrodes using potentiodynamic growth (0-1.2 V at 100 mV/s for 1-3 scans) in a solution of 0.1 M **pyrrole containing** 50 ppm anti-Legionella antibody in tris-glycine buffer, pH 6.0. After preparation, the **polymer** containing the antibodies interacted with .apprx.1000 Legionella cells/mL to alter the elec. properties of the **polymer** (voltage response curve given).

=> s 121 not 122

L23 11 L21 NOT L22

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L23 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:889054 CAPLUS  
DOCUMENT NUMBER: 137:377388  
TITLE: Imaging materials comprising electrically conductive **polymer** particle layers  
INVENTOR(S): Lelental, Mark; Mosehauer, Gary M.; Owers, Roger J.; Wakley, James L.  
PATENT ASSIGNEE(S): Eastman Kodak Company, USA  
SOURCE: PCT Int. Appl., 36 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002093256	A1	20021121	WO 2002-US14646	20020509
W: BR, CN, IN, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
US 2003008247	A1	20030109	US 2002-139684	20020506
US 6709808	B2	20040323		
EP 1297381	A1	20030402	EP 2002-734301	20020509
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
BR 2002005275	A	20030701	BR 2002-5275	20020509
JP 2004520625	T2	20040708	JP 2002-589876	20020509
PRIORITY APPLN. INFO.:			US 2001-290721P	P 20010514
			WO 2002-US14646	W 20020509

OTHER SOURCE(S): MARPAT 137:377388

AB Image-forming materials including photog., thermog., and thermally-developable imaging materials include one or more transparent elec. conductive, non-charging layers to provide antistatic control on one or both sides of subbed or unsubbed **supports**. The elec. conductive, non-charging layers comprise colloidal, elec. conductive **polymer** particles that can be dispersed in a film-forming binder in an amount to provide about 10-90 volume % of **polymer** particles. Particularly useful **polymer** particles include **pyrrole-containing**, thiophene-containing, and aniline-containing **polymers**. The particles generally exhibit a packed powder specific resistivity of  $\leq 105$  ohm-cm and generally have a mean diameter of  $\leq 0.5$   $\mu$ m. The elec. conductive, non-charging layers generally exhibit a surface elec. resistivity of  $< 1 \times 10^{12}$  ohm per square.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:1216 CAPLUS

DOCUMENT NUMBER: 136:347174

TITLE: A novel method for large-area sources preparation for the calibration of  $\beta$ - and  $\alpha$ -contamination monitors

AUTHOR(S): Tsoupkov-Sitnikov, V.; Piccolo, J. L.; Carrier, M.; Peulon, S.; Moutard, G.

CORPORATE SOURCE: CEA/DAMRI Saclay, BNM-LNHB, Laboratoire National Henri Becquerel, Gif-sur-Yvette, 91191, Fr.

SOURCE: Applied Radiation and Isotopes (2002), 56(1-2), 21-29  
CODEN: ARISEF; ISSN: 0969-8043

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A method is proposed for the preparation of large-area reference sources for the

calibration of  $\beta$ - and  $\alpha$ -contamination monitors. It is based on the incorporation, by the ion-exchange mechanism, of the radionuclide in a thin film of a conducting **polymer** ion-exchanger preliminarily grown on a metal **support**. Conducting **pyrrole-based polymer** functionalized by carboxylic cation-exchange groups was used to prepare  $^{60}\text{Co}$  and  $^{90}\text{Sr}$ - $^{90}\text{Y}$   $\beta$ -particle sources. Electrochem. polymerization of the corresponding monomer on different conducting **supports** was studied and a special electrochem. equipment developed permitting the preparation of large-area **polymer** films of controlled and reproducible thickness. The ion-exchanger obtained was characterized in terms of chemical affinity for cations  $\text{Co}^{2+}$  and

Sr2+. Incorporation of the radionuclides in the large-area ion-exchanger films thus obtained was studied and optimized with respect to the uniform distribution of the radionuclide. The performance of the procedure is demonstrated using the example of circular sources 44 mm in diameter prepared on stainless steel **supports**. The sources obtained were characterized in terms of activity,  $\beta$ -particle flux, uniformity and source efficiency.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:802455 CAPLUS

DOCUMENT NUMBER: 136:34098

TITLE: A printable glucose sensor based on a poly(pyrrole)-latex hybrid material

AUTHOR(S): Kros, A.; van Hovel, S. W. F. M.; Nolte, R. J. M.; Sommerdijk, N. A. J. M.

CORPORATE SOURCE: Department of Organic Chemistry, University of Nijmegen, Nijmegen, Neth.

SOURCE: Sensors and Actuators, B: Chemical (2001), B80(3), 229-233

CODEN: SABCEB; ISSN: 0925-4005

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A printable glucose sensor was obtained by **immobilization** of glucose oxidase onto the surface of poly(pyrrole)-coated latex spheres, which were mixed with a conducting ink. The obtained hybrid material was able to amperometrically detect glucose under aerobic as well as anaerobic conditions, without the use of electron mediators. Since all of the steps involved in the preparation of this latex-poly(**pyrrole**)-**based** ink are performed in solution, in-expensive mass production will be possible.

A possible mechanism for this sensor is proposed based on the direct communication between the enzyme and the conducting **polymer** under anaerobic conditions.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:870594 CAPLUS

DOCUMENT NUMBER: 134:159626

TITLE: Use of polypyrrole film containing Fe(CN)6<sup>3-</sup> as pseudo-reference electrode: application for amperometric **biosensors**

AUTHOR(S): Gros, P.; Durliat, H.; Comtat, M.

CORPORATE SOURCE: Laboratoire de Genie Chimique, UMR CNRS 5503, Universite Paul Sabatier, Toulouse, 31062, Fr.

SOURCE: Electrochimica Acta (2000), 46(5), 643-650

CODEN: ELCAAV; ISSN: 0013-4686

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A poly-**pyrrole-containing** Fe(CN)6<sup>3-</sup> modified electrode was prepared by anodic electropolymerization at 0.8 V vs. SCE of an aqueous solution containing only pyrrole and K4Fe(CN)6. The concentration of electroactive Fe(CN)6<sup>3-</sup> ions in

the **polymer** was found to be 30 times higher than that of the ferrocyanide ions in the electrolytic solution. Furthermore the Fe(CN)6<sup>3-</sup>/Fe(CN)6<sup>4-</sup> redox system exhibited a high degree of reversibility. These properties made it possible to use the modified electrode as a pseudo-reference in a weakly polarized two-electrode device for the design of

amperometric **biosensors** involving NAD-dependent dehydrogenases. The assay of D-lactic acid was taken as an example using D-lactate dehydrogenase and diaphorase. The sensitivity of the **biosensor**, i.e. 20  $\mu\text{A mM}^{-1} \text{ cm}^{-2}$ , was similar to that in previous studies. The modified electrode exhibited a relatively stable potential for currents lower than 100 nA and had an operating life of more than 2 mo.

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:686383 CAPLUS

DOCUMENT NUMBER: 133:274316

TITLE: Scratch resistant antistatic layer for imaging elements

INVENTOR(S): Majumdar, Debasis; Anderson, Charles Chester

PATENT ASSIGNEE(S): Eastman Kodak Company, USA

SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1039342	A1	20000927	EP 2000-200894	20000313
EP 1039342	B1	20050504		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6187522	B1	20010213	US 1999-276530	19990325
JP 2000298329	A2	20001024	JP 2000-88543	20000324
PRIORITY APPLN. INFO.:			US 1999-276530	A 19990325

AB An imaging element comprises a **support**, an image-forming layer superposed on the **support** and an outermost scratch resistant antistatic layer with thickness 0.6-10  $\mu$  superposed on the **support**. The scratch resistant layer is composed of a ductile **polymer** having a modulus >100 MPa measured at 20 °C and a tensile elongation to break >50%, a filler particle having a modulus >10 GPa, and an elec. conducting **polymer**. The volume ratio of the **polymer** to the filler particle is between 70:30 and 40:60 and the elec.-conducting **polymer** is present at a weight concentration based on a total dried weight of the scratch resistant layer of 1-10 weight%. The ductile **polymer** may be a polycarbonate, polyurethane, or polyolefin. The elec.-conducting **polymer** may be a substituted or unsubstituted **pyrrole-containing polymer**, a substituted or unsubstituted thiophene-containing **polymer**, a substituted or unsubstituted aniline-containing **polymer**, or polyisothianaphthene, especially polypyrrole styrene sulfonate or 3,4-dialkoxy substituted polypyrrole styrene sulfonate. The hard filler may be colloidal SiO<sub>2</sub>, colloidal tin oxide, colloidal TiO<sub>2</sub>, mica, clays, doped metal oxides, metal oxides with oxygen deficiencies, metal antimonates, conductive nitrides, carbides or borides.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:276992 CAPLUS

DOCUMENT NUMBER: 122:56808

TITLE: Process and catalysts for olefin polymerization

INVENTOR(S): Pettijohn, Ted M.; Reagen, William K.; Martin, Shirley J.

PATENT ASSIGNEE(S): Phillips Petroleum Co., USA

SOURCE: U.S., 6 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5331070	A	19940719	US 1992-976124	19921113
US 5393719	A	19950228	US 1994-194606	19940210
			US 1992-976124	A3 19921113

PRIORITY APPLN. INFO.:

AB Olefins are polymerized in the presence of: (a) a catalyst system composition consisting essentially of chromium oxide supported on an inorg. oxide **support**; (b) a **pyrrole-containing** compound; and (c) a non-hydrolyzed metal alkyl selected from the group consisting of aluminum alkyls, lithium alkyls, magnesium alkyls, zinc alkyls, and mixts. thereof. The use of this type of polymerization process can produce an olefin comonomer in-situ, resulting in **polymers** having decreased d. and increased branching.

L23 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:108935 CAPLUS

DOCUMENT NUMBER: 120:108935

TITLE: Electrochemical, spectroelectrochemical and EPR properties of poly(pyrrole-viologens)

AUTHOR(S): Lapkowski, M.; Bidan, G.

CORPORATE SOURCE: Institute of Chemical Physics and Technology of Polymers, Silesian Technical University, Gliwice, 44-100, Pol.

SOURCE: Journal of Electroanalytical Chemistry (1993), 362(1-2), 249-56

CODEN: JECHE5; ISSN: 0368-1874

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Spectroelectrochem. and EPR studies of three viologens, N-methyl-N'-(2-pyrrol-1-yl-ethyl)-4,4'-bipyridinium bis(tetrafluoroborate) (MPEB), N-methyl-N'-(2-pyrrol-1-yl-propyl)-4,4'-bipyridinium bis(tetrafluoroborate) (MPPB), and N,N'-bis-(2-pyrrol-1-yl-propyl)-4,4'-bipyridinium bis(tetrafluoroborate) (BPPB), are presented. All three viologens undergo a two-step reduction leading to significant changes in their electronic spectra and EPR responses. Oxidative polymerization of the above compds. results in the formation of good quality **polymer** films. Modified electrodes obtained by the polymerization of viologen-substituted pyrroles are studied by electrochem., spectroelectrochem. and EPR methods. The N-substituted pyrroles can be electrochem. polymerized to give films in which grafted viologen units retain their spectroelectrochem. and magnetic properties. Like viologens not bound to the **polymer** matrix, they undergo a two-step reversible reduction resulting in clearly different electronic spectra for each reduction state and an EPR response showing the formation and annihilation of radical cations. Anal. of the electronic spectra obtained for the first reduction product strongly indicates that the radical cations formed undergo dimerization to a degree which is dependent on the mobility of the viologen mol. in the **polymer** matrix. The following sequence of this association ability is (MPPB) > (MPEB) > (BPPB). EPR spectra originating from the reduction of viologens covalently entrapped in the **polymer** matrix are broad and do not reveal any hyperfine structure. This observation strongly indicates that spin sites are **immobilized** and that the rate of electron transfer is high. Poly(pyrrole-viologen)-modified electrodes are stable in nonaq. solns. and can be reversibly switched between the two reduction states. In aqueous solns. only the first viologen redox system is reversible. However, the system is unstable with respect to the second redox couple.



L23 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:590666 CAPLUS

DOCUMENT NUMBER: 119:190666

TITLE: Electrochemical properties of [(C5Me5)RhIII(L)Cl]+ complexes (L = 2,2'-bipyridine or 1,10-phenanthroline derivatives) in solution and in related polypyrrolic films. Application to electrocatalytic hydrogen generation

AUTHOR(S): Chardon-Noblat, Sylvie; Cosnier, Serge; Deronzier, Alain; Vlachopoulos, Nicolas

CORPORATE SOURCE: Lab. Electrochim. Org. Photochim. Redox, Univ. Joseph Fourier Grenoble 1, Grenoble, 38041, Fr.

SOURCE: Journal of Electroanalytical Chemistry (1993), 352(1-2), 213-28  
CODEN: JECHES; ISSN: 0368-1874

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Electrochem. characterization of a series of Rh(III) complexes [(C5Me5)RhIII(L)Cl]+ containing a 2,2'-bipyridine or 1,10-phenanthroline derivative as the ligand L is described. The reduction involves a 2-electron reduction of the metal center leading to [(C5Me5)RhI(L)Cl]-, which is in equilibrium with the Cl-free species [(C5Me5)RhI(L)]0. The relative amts. of the 2 compds. depend on the nature of the ligand L. Films of the corresponding substituted polypyrroles are prepared by oxidative polymerization of the complexes containing a pyrrole-ligand derivative. **Immobilization** of the complexes into a polymeric film allows the buildup of the reactive species [(C5Me5)RhIII(L)]2+ as a consequence of its slow coordination by the released chloro ligand into the polymeric form. The electrocatalytic ability of these polypyrrolic Rh(III) complex films for H2 evolution was demonstrated.

L23 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:449721 CAPLUS

DOCUMENT NUMBER: 117:49721

TITLE: Polyphosphazenes bearing polymerizable pyrrole, thiophene, and furan side groups: synthesis and chemical oxidation

AUTHOR(S): Allcock, Harry R.; Dodge, Jeffrey A.; Van Dyke, Leon S.; Martin, Charles R.

CORPORATE SOURCE: Dep. Chem., Pennsylvania State Univ., University Park, PA, 16802, USA

SOURCE: Chemistry of Materials (1992), 4(4), 780-8  
CODEN: CMATEX; ISSN: 0897-4756

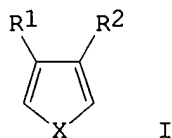
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Several polyorganophosphazenes containing polymerizable, heterocyclic side groups, (e.g., furan, thiophene, and pyrrole derivs.) were prepared by reaction of polydichlorophosphazenes with the Na salt of the corresponding heterocyclic alkoxide. The prepared polyphosphazenes were doped with Fe(ClO4)3, FeCl3, or I to give semi-conductive **polymers**, and the conductivity is discussed with respect to polymerization of the heterocycle within the **polymer**. The prepared **polymers** were characterized by NMR spectroscopy, gel permeation chromatog., elemental microanal., and DSC. Possible explanations for the relatively low conductivity of the **polymers** are discussed, including interchain hopping distances, insoly. of the crosslinked **polymers**, and **immobilization** of the heterocyclic side groups. The last 2 factors may serve to minimize heterocyclic **polymer** chain growth, thereby keeping the resultant conductivity low.

L23 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1991:258201 CAPLUS  
 DOCUMENT NUMBER: 114:258201  
 TITLE: Manufacture of solid electrolytic capacitor having heterocyclic **polymer** electrolyte  
 INVENTOR(S): Naito, Kazumi; Nakamura, Hidenori  
 PATENT ASSIGNEE(S): Showa Denko K. K., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03006808	A2	19910114	JP 1989-142718	19890605
JP 06082592	B4	19941019		
PRIORITY APPLN. INFO.:			JP 1989-142718	19890605
GI				



AB The title capacitor is prepared by treating a dielec. oxide-coated valve metal with an oxidant and forming a semiconductive layer by electrolytic polymerization in a solution containing heterocyclic monomer I (R1-2 = H, alkyl, alkoxy; X = O, S, NR3; R3 = H, alkyl). The resulting capacitor having rapidly prepared electrolyte shows high frequency characteristics. Thus, an etched Al foil was formed in aqueous mixture of phosphoric acid and ammonium phosphate, impregnated with aqueous ammonium persulfate, and impregnated with an acetonitrile solution of **pyrrole containing** Bu4NBF4 to form an elec. conductive **polymer** electrolyte.

L23 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1990:402990 CAPLUS  
 DOCUMENT NUMBER: 113:2990  
 TITLE: Conductive layer and **polymer** membrane in enzyme **biosensor**  
 INVENTOR(S): Uchida, Naoto; Yamaguchi, Hideichiro; Shimomura, Takeshi; Mori, Taketoshi; Koyama, Noboru  
 PATENT ASSIGNEE(S): Terumo Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01263551	A2	19891020	JP 1988-90370	19880414
PRIORITY APPLN. INFO.:			JP 1988-90370	19880414
AB				

An enzyme **biosensor** consists of a conductive layer formed on a ceramic or plastic plate and an enzyme-containing layer of **polymers**

of water-soluble monomers selected from pyrrole, pyrrole derivs.,  
**pyrrole-containing** cyclic compds., diaminobenzene, phenol,  
catechol, phloroglucin, thiophene, and thiophene derivs. Construction of  
a glucose sensor consisting of an Ir oxide layer on an Al plate and a  
glucose oxidase-containing polypyrrole membrane is cited as an example.

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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
127.49	456.25

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-11.68	-11.68

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